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PN - DE19954343 A 20010523
PD - 2001-05-23
PR - DE19991054343 19991111
OPD - 1999-11-11
TI - Surface emitting laser diode enables higher light yield to be achieved with less heating
AB - The surface emitting laser diode has a semiconducting layer structure for vertical emission with an active layer (1) enclosed between electrically conductively doped confinement layers (2,3,4) on which electrical connections (9,10) are mounted. Reflectors (7,8) acting in the vertical direction act as resonator end mirrors. Two confinement layers with different conductivity sign are provided for a side of the active layer for the output of generated radiation from the diode. A tunnel junction between the confinement layers is formed by two intermediate layers (5,6) that are highly doped for mutually opposite conductivity signs. The tunnel junction is restricted by lateral structuring to a current injection region.
IN - AMANN MARKUS CHRISTIAN (DE)
PA - INFINEON TECHNOLOGIES AG (DE)
ICO - T01S5/042C
EC - H01S5/183
IC - H01S5/183
CT - EP0869593 A1 []; WO9807218 A1 []

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TI - Surface emitting laser diode enables higher light yield to be achieved with less heating - has two confinement layers with different conductivity sign, tunnel junction formed by two highly doped intermediate layers restricted by lateral structuring to current injection region
PR - DE19991054343 19991111
PN - DE19954343 A1 20010523 DW200137 H01S5/183 004pp
PA - (SIEI) INFINEON TECHNOLOGIES AG
IC - H01S5/183
IN - AMANN M C
AB - DE19954343 The surface emitting laser diode has a semiconducting layer structure for vertical emission with an active layer (1) enclosed between electrically conductively doped confinement layers (2,3,4) on which electrical connections (9,10)

are mounted. Reflectors (7,8) acting in the vertical direction act as resonator end mirrors.

- Two confinement layers with different conductivity sign are provided for a side of the active layer for the output of generated radiation from the diode. A tunnel junction between the confinement layers is formed by two intermediate layers (5,6) that are highly doped for mutually opposite conductivity signs. The tunnel junction is restricted by lateral structuring to a current injection region.
- USE - For optical communications.
- ADVANTAGE - Enables higher light yield to be achieved with less heating.
- (Dwg.1/1)

OPD - 1999-11-11

AN - 2001-345064 [37]